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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,937	12/04/2001	Soryu Nakayama	10059-401US (P25379-01)	1922
570	7590	03/09/2004	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103-7013			CHANEY, CAROL DIANE	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,937

Applicant(s)

NAKAYAMA ET AL.

Examiner

Carol Chaney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 and 12-15 is/are allowed.
- 6) ☒ Claim(s) 1-6, 11 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/23/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5, 6, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Shinyama et al., US Patent 6,548,210 B1 for reasons of record.

Shinyama et al. disclose nickel electrodes for alkaline batteries. With regards to claims 1, 2 and 6, the electrodes are formed by impregnating a sintered, porous nickel substrate with an aqueous solution of nickel nitrate and cobalt nitrate, and then dipping the substrate into a sodium hydroxide solution. A solid solution of nickel and cobalt hydroxide is thus filled into the porous nickel substrate. The solid solution is the electrode active material. The porous nickel substrate impregnated with a solid solution of nickel and cobalt hydroxide active material is a "positive electrode plate". (See column 10, lines 33-54.) A coating layer is subsequently formed over the active material layer. Coating layers which are a combination of nickel hydroxide and manganese hydroxide, or a combination of cobalt and manganese hydroxides are exemplified. With regards to claim 3, the example using cobalt and manganese will have cobalt hydroxide on the electrode active material outer surface. (See column 37, Table 21, examples F1 and F6, and column 39, lines 9-50.)

With regards to claim 5, the electrodes disclosed by Shinyama et al. are used in alkaline secondary batteries having a hydrogen storage alloy as a negative electrode, a polyolefin separator and an alkaline electrolyte. (column 11, lines 36-48.)

With regards to claim 11, Shinyama et al. disclose forming a manganese hydroxide layer (3) on an active material layer (2). The process includes dipping a positive electrode plate--a sintered nickel substrate with a nickel-hydroxide based active material--into an aqueous manganese nitrate solution, and then dipping the plate in an aqueous hydroxide solution. (Column 36, lines 18-31.) Manganese hydroxide will precipitate on the surface of the nickel hydroxide active material as a result of this process. The precipitation is considered applying manganese compound, and is considered to "cause the positive electrode to retain a manganese compound", ie manganese hydroxide.

With regards to claim 16, Shinyama et al. disclose an example in which the coating layer formed on the nickel hydroxide based active material is manganese hydroxide. (See column 16, lines 50-62.)

Claim Rejections - 35 USC § 103

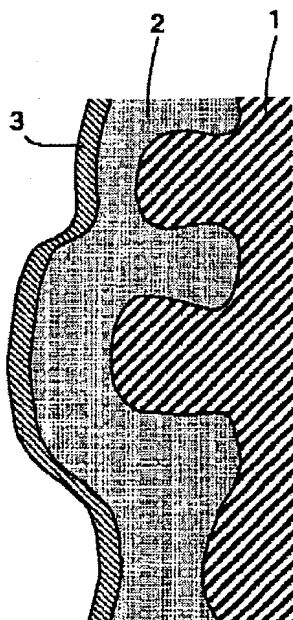
Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinyama et al. for reasons of record.

Response to Arguments

Applicant's arguments filed 15 December 2003 have been fully considered but they are not persuasive. Applicants assert the location of the manganese compound in the Shinyama et al. invention and in the instant invention are distinguished. Applicants

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assert that in the present invention a layer of a manganese compound is found on the surface of the "electrode plate", which contains a substrate of sintered nickel and an active material. This appears identical to the location of the manganese layer of the Shinyama et al. invention, where the sintered substrate (1) and the active material (2) form an "electrode plate" with a layer of a manganese compound (3) on the surface. It is noted that the coating layer (3) of the Shinyama et al. invention can be either a solid solution of manganese and cobalt hydroxide, manganese and nickel hydroxide, or pure manganese hydroxide. (See column 37, lines 40-55.) In all of these examples, the coating layer is a manganese compound. Applicants' claims 1-6 and 11 do not exclude other metal elements in the manganese coating compounds. The manganese valence will be at least 2, since +2 is the lowest stable oxidation state of manganese.



Allowable Subject Matter

Claims 7-9 and 12-15 are allowed for reasons given in the previous office action of 12 September 2003.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (571) 272-1284. The examiner can normally be reached on Mon - Fri 8:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Carol Chaney
Primary Examiner
Art Unit 1745

5 March 2004